<u>**AMENDMENTS TO THE CLAIMS:**</u>

1. - 30. (Canceled)

31. **(Currently amended)** A pharmaceutical composition formulated for human administration and effective in treating a neoplastic disease or eliciting an anti-tumor immunological response, comprising:

    a) a human cell expressing a cytokine from a recombinant polynucleotide; and

    b) a pharmaceutical excipient;

wherein the cytokine **comprises a heterologous transmembrane region and** is stably associated in the cell outer membrane, and

wherein the cell has been inactivated to prevent proliferation.

32. (Previously presented) The composition of claim 31, wherein the cytokine is selected from IL-4, GM-CSF, IL-2, TNF-α, and M-CSF.

33. (Previously presented) The composition of claim 31, wherein the cell is a cancer cell.

34. (Previously presented) The composition of claim 31, wherein the cell is from a tumor of the same tissue type as a tumor in the human.

35. **(Currently Amended)** ~~The composition of claim 34, wherein the tumor is an ovarian cancer or a brain cancer~~

    A pharmaceutical composition formulated for human administration and effective in treating a neoplastic disease or eliciting an anti-tumor immunological response, comprising:

    a) a human tumor cell expressing a cytokine from a recombinant polynucleotide, wherein the tumor is ovarian cancer or brain cancer; and

    b) a pharmaceutical excipient;

wherein the cytokine is stably associated in the cell outer membrane, and

wherein the cell has been inactivated to prevent proliferation.

36. (Previously presented) The composition of claim 31, wherein the cell is allogeneic to the human.

37. (Previously presented) The composition of claim 31, wherein the cell is histocompatibly identical to the human.

38. **(Currently amended)** The composition of ~~claim 31~~ **any of claims 31, 65, and 66**, further comprising a tumor-associated antigen, wherein the combination of the cytokine and the tumor-associated antigen in the composition is effective in treating a neoplastic disease or eliciting an anti-tumor immunological response in the human.

39. (Previously presented) The composition of claim 38, wherein the tumor-associated antigen is obtained from a cell autologous to the human.

40. (Previously presented) The composition of claim 38, wherein the tumor-associated antigen is expressed by the same cells expressing the membrane-associated cytokine.

41. (Previously presented) The composition of claim 38, comprising a combination of:
     a) the cell expressing the membrane-associated cytokine; and
     b) a tumor cell autologous to the human;
     wherein the combination is effective in treating a neoplastic disease or eliciting an anti-tumor immunological response in the human.

42. (Previously presented) The composition of claim 41, wherein the tumor cell is a primary tumor cell dispersed from a solid tumor obtained from the human.

43. **(Currently Amended)** ~~The composition of claim 41, wherein the tumor cell is a glioma, a glioblastoma, a gliosarcoma, an astrocytoma, or an ovarian cancer cell~~ .

A pharmaceutical composition formulated for human administration and effective in treating a neoplastic disease or eliciting an anti-tumor immunological response, comprising:

a) a human cell expressing a cytokine from a recombinant polynucleotide, wherein the cytokine is stably associated in the cell outer membrane, and the cell has been inactivated to prevent proliferation;

b) a pharmaceutical excipient; and

c) a tumor cell autologous to the human selected from a glioma, a glioblastoma, a gliosarcoma, an astrocytoma, or an ovarian cancer cell;

wherein the combination is effective in treating a neoplastic disease or eliciting an anti-tumor immunological response in the human.

44. (Previously presented) The composition of claim 41, wherein the tumor cell has been inactivated by irradiation.

45. (Previously presented) The composition of claim 31, wherein the cell expressing the membrane-associated cytokine has been inactivated by irradiation.

46. (Previously presented) The composition of claim 31, wherein the cell produces a secreted cytokine in addition to the cytokine stably associated in the outer membrane.

47. (Previously presented) The composition of claim 31, wherein a majority of the cytokine produced by the cell is present on the outer membrane of the cell.

48. (Previously presented) The composition of claim 38, wherein the cytokine is selected from IL-4, GM-CSF, IL-2, TNF-α, and M-CSF.

49. (Canceled)

50. (Previously presented) A unit dose of the composition according to claim 31, wherein the number of cells in the composition is at least about 5×10^6 but not more than about 2×10^8.

51. (Canceled)

52. **(Currently amended)** The composition of ~~claim 31~~ **claim 43**, wherein the cytokine naturally occurs as a membrane cytokine.

53. **(Currently amended)** The composition of ~~claim 31~~ **any of claims 43, 65, and 66**, wherein the cytokine is a fusion protein comprising a heterologous transmembrane region.

54. **(Currently amended)** The composition of claim 31, wherein the cell has been transduced **in vitro** with a retroviral expression vector, or is the progeny of such a cell.

55. **(Currently amended)** A method for producing the composition of claim 31, comprising transducing the cell **in vitro** with an expression vector encoding the membrane-associated cytokine.

56. (Previously presented) The method of claim 55, wherein the expression vector is a retroviral vector.

57. (Previously presented) The method of claim 55, wherein the cytokine is selected from IL-4, GM-CSF, IL-2, TNF-α, and M-CSF.

58. (Previously presented) The method of claim 55, wherein the cytokine is expressed under control of a cytomegalovirus (CMV) promoter.

59. (Previously presented) The method of claim 55, wherein the cell is from a cancer of the same tissue type as a tumor in the human.

60. (Previously presented) The method of claim 55, wherein the cell is allogeneic to the human.

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61. (Previously presented) The method of claim 55, wherein the cell is histocompatibly identical to the human.

62. **(Currently amended)** A method for producing the composition of claim 38, comprising transducing a cell **in vitro** with an expression vector encoding the membrane-associated cytokine, and providing the transduced cell in combination with the tumor-associated antigen.

63. (Previously presented) The method of claim 55, further comprising inactivating the cell to prevent proliferation.

64. (Previously presented) The method of claim 55, further comprising irradiating the cell.

65. **(Currently Amended)** ~~The composition of claim 31, wherein the cytokine is IL-4~~
A pharmaceutical composition formulated for human administration and effective in treating a neoplastic disease or eliciting an anti-tumor immunological response, comprising:
    a) a human cell expressing an IL-4 from a recombinant polynucleotide; and
    b) a pharmaceutical excipient;
wherein the IL-4 is stably associated in the cell outer membrane, and
wherein the cell has been inactivated to prevent proliferation.

66. **(Currently Amended)** ~~The composition of claim 31, wherein the cytokine is GM-CSF~~
A pharmaceutical composition formulated for human administration and effective in treating a neoplastic disease or eliciting an anti-tumor immunological response, comprising:
    a) a human cell expressing a GM-CSF from a recombinant polynucleotide; and
    b) a pharmaceutical excipient;
wherein the GM-CSF is stably associated in the cell outer membrane, and
wherein the cell has been inactivated to prevent proliferation.

67. (Previously presented) The composition of claim 31, wherein the cytokine is M-CSF.

68. **(Currently Amended)** ~~A pharmaceutical composition effective in treating a neoplastic disease or eliciting an anti-tumor immunological response, comprising:~~

~~a) a human cell expressing a cytokine from a recombinant polynucleotide; and~~

~~b) a pharmaceutical excipient;~~

~~wherein the cytokine is stably associated in the cell outer membrane, and~~

The composition of claim 31, wherein the composition has been formulated for administration to an allogeneic human subject.

69. (Previously presented) The composition of claim 68, wherein the cytokine is selected from IL-4, GM-CSF, IL-2, TNF-α, and M-CSF.

70. (Previously presented) The composition of claim 68, wherein the cell is a cancer cell.

71. (Previously presented) The composition of claim 68, wherein the cell is from a tumor of the same tissue type as a tumor in the human.

72. (Previously presented) The composition of claim 68, further comprising a tumor-associated antigen, wherein the combination of the cytokine and the tumor-associated antigen in the composition is effective in treating a neoplastic disease or eliciting an anti-tumor immunological response in the human.

73. (Previously presented) The composition of claim 72, wherein the tumor-associated antigen is obtained from a cell autologous to the human.

74. (Previously presented) The composition of claim 72, wherein the tumor-associated antigen is expressed by the same cells expressing the membrane-associated cytokine.

75. (Previously presented) The composition of claim 72, comprising a combination of:

    a) the cell expressing the membrane-associated cytokine; and

    b) a tumor cell autologous to the human;

    wherein the combination is effective in treating a neoplastic disease or eliciting an anti-tumor immunological response in the human.

76. (Previously presented) The composition of claim 75, wherein the tumor cell is a primary tumor cell dispersed from a solid tumor obtained from the human.

77. (Previously presented) The composition of claim 68, wherein the cell expressing the membrane-associated cytokine has been inactivated by irradiation.

78. **(Currently amended)** A method for producing the composition of claim 68, comprising transducing the cell **in vitro** with an expression vector encoding the membrane-associated cytokine.

79. (Previously presented) The method of claim 78, wherein the expression vector is a retroviral vector.

80. (Previously presented) The method of claim 78, further comprising inactivating the cell to prevent proliferation.

81. (Previously presented) The method of claim 78, further comprising irradiating the cell.

82 (Currently Amended) ~~A pharmaceutical composition formulated for human administration and effective in treating a neoplastic disease or eliciting an anti-tumor immunological response, comprising:~~

~~a) a human cell expressing a cytokine from a recombinant polynucleotide; and~~

~~b) a pharmaceutical excipient;~~

~~wherein the cytokine is stably associated in the cell outer membrane, and~~

~~wherein the cell has been inactivated to prevent proliferation, and~~

The composition of claim 31, wherein the number of cells in the composition is at least about 5×10^6.